

# Test materials for UV permeability

## You need:

- a matchbox with UV sensitive beads
- miscellaneous testing materials
- a piece of string for making a bracelet
- scissors, markers for decorating the box

**Keep the UV-beads in the box before testing.**

## Let's start:

Put a piece of testing material on the closed box.

Open the box. The UV beads need to be fully covered by the testing material. Expose the box to sunlight for a while.

If the beads change colour, the material does not fully block UV light.

**Find other materials for testing.**

**Do your sunglasses protect you well from UV light??**

**Make a bracelet with your UV beads.**

## **How do UV beads work?**

They are made from transparent plastic ,coloured' with a chemical substance.

This substance changes colour when exposed to UV light.

If you wear a bracelet with UV beads you can always see if you are exposed to UV light.

Too much of it is not healthy.

## Notes for activity guides: materials

### UV beads

Are available in the United States of America for example at [stevespanglerscience.com](http://stevespanglerscience.com), in Germany at [stolina.de](http://stolina.de) by the name of Zauberperlen. I haven't found them in Switzerland.

### Testing materials

- plastic, fabrics, paper, wood, metal etc.
  - various glasses, goggles, ski glasses, sun glasses
- Kids can test their own sunglasses.

